

EXECUTING QUALITY MANAGEMENT STRATEGIES USING BALANCED SCORECARD

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ABSTRACT

This paper addresses the role of Balanced Scorecard (BSC) in enhancing the effectiveness of Quality Management Strategies (QMSs) implementation. Indeed, QMSs have attracted much attention following the strategic advantages that quality improvement can offer. However, a good strategy alone is not enough. The ability of organization to execute strategy could be more critical than the strategy itself. Thus, the BSC has been recognized as a promisable strategic control system for translating a strategy into action. For organizations that already have a strategy, the BSC can help them implement their strategy successfully. The BSC has also been recognized as consistent with QMS. Therefore, BSC can be used by organization in executing their QMS effectively. This paper reviews existing literature on this prominent issue and suggests direction for future research.

Keywords: *Quality Management, Balanced Scorecard*

INTRODUCTION

Quality Management has become a universal strategy for the survival and growth of an organization in today's fiercely global competitive environment. It has evolved through several stages ranging from 'quality by inspection', 'statistical quality control (SQC)', 'quality assurance (QA)', and 'total quality management (TQM)' (Prybutok & Ramasesh, 2005). Many firms have embraced various strategies of quality management following the strategic advantages that quality improvement can offer. In the same vein, many studies (for example, see: Li et al., 2003; Yasin, et al., 2004; and Arawati, 2005) have revealed that there is a significant relationship between QMS and organizational excellence. However, QMS could be implemented more successfully with the BSC, which is a strategic control system that explicitly designed to manage strategy (Andersen, Lawrie & Savic, 2004).

The BSC is among the top current issues in management accounting (Chenhall, 2005). It is widely used by various types of organizations in order to assist their organizations in achieving excellence performance. For example, the BSC is recognized as a strategic control system which can align organizational and individual goals to overall organizational strategy (Norreklit, 2000). The role of BSC as a strategic control system for managing strategy is really critical since 70 percent to 90 percent of organizations failed to execute their strategy effectively (Kaplan & Norton, 2001). Following literature, QMS has emerged as one of the formidable strategy of organizational excellence (Galgano, 2002). Thus, the role of the BSC in executing the QMS has becomes an important agenda to be researched.

The remainder of this paper is organized as follows. The next two sections review the literature on QMSs with particular reference to their effect on organizational excellence. Literature review on the BSC and their effect on organizational excellence are then presented, followed by discussion on the role of the BSC in executing QMS and their effect on excellence performance. The last section provides conclusion for this paper and directions for future research.

QUALITY MANAGEMENT STRATEGIES (QMS)

The importance of QMSs have been well recognized since the 1980's (Lin & Johnson, 2004). It will help organizational leaders in seeking ways to achieve excellence performance. A recently reviewed literature by Sila and Ebrahimpour (2002) offers a comprehensive review of 347 research papers based on survey studies conducted in different countries and published between 1989 and 2000 in a variety of journals. By examining 76 survey studies that use an holistic approach to quality management, their article revealed that 25 QMSs are belong to be the most commonly extracted strategies across the studies. Furthermore, by using these 25 strategies as a framework, they revealed that the most seven frequently mentioned QMSs in the literature were customer focus and satisfaction; employee training; leadership and top management commitment; teamwork;

employee involvement; continuous improvement and innovation; and quality information. Thus, the most seven frequently mentioned QMSs in the quality management literature as mentioned above, are tabled below.

Table 1: Quality Management Strategies and related literature

Quality Management Strategies	Related Literature
(1) Leadership and top management Commitment	Saraph et al. (1989); Flynn et al. (1994); Powell (1995); Ahire et al. (1996); Black & Porter (1996); Li et al. (2003); Anderson et al. (1994); Sanchez-Rodriguez et al. (2004); Wu et al. (1997); Arawati (2005).
(2) Customer focus and satisfaction	Flynn et al. (1994); Ahire et al. (1996); Li et al. (2003); Black & Porter (1996); Powell (1995); Wu et al. (1997); Anderson et al. (1994); Arawati (2005).
(3) Employee involvement; (4) Employee training (5) Teamwork	Saraph et al. (1989); Ahire et al. (1996); Black and Porter (1996); Powell (1995); Arawati (2005); Wu et al. (1997); Anderson et al. (1994); Li et al. (2003).
(6) Continuous improvement	Powell (1995); Anderson et al. (1994); Li et al. (2003).
(7) Quality information	Saraph et al. (1989); Flynn et al. (1994); Wu et al. (1997); Ahire et al. (1996); Black & Porter (1996);

QUALITY MANAGEMENT STRATEGIES AND EXCELLENCE

Numerous prior investigations have recognized the relationship between QMSs and organizational performance. QMSs have also been recognized as a driver of organizational excellent (Kanji, 2002). However, it is important to gain in depth understanding on which QMSs that drive organizational excellent and how each QMSs contribute to an organizational excellence (Moura E Sa & Kanji, 2003). The detailed explanation about this issue is presented in the next paragraph.

Many prior studies recognized the relationship between leadership and top management commitment and organizational excellence (Flynn et al., 1995; Powell, 1995; Yasin et al., 2004; Sanchez-Rodriguez et al., 2004; Arawati, 2005). In the same vein, numerous researchers also recognized that customer focus can result in excellence organizational performance (Madu et al., 1995; Yasin et al., 2004; Jacob et al., 2004).

Further, numerous studies have identified the relationship between human resource management (including employee involvement; employee training; and teamwork) and better organizational performance (Flynn, et al., 1995; Powell, 1995; Madu et al., 1995; Yasin et al., 2004; Sanchez-Rodriguez et al., 2004; Arawati, 2005). By the same token, there are also much evidence indicating that continuous improvement can result in good organizational performance (Anderson, 1994; Flynn, et al., 1995; Powell, 1995; Li et al., 2003). Similarly, much of the previous quality management studies have revealed a strong relationship between quality information and organizational excellence (Flynn, et al., 1995; Sanchez-Rodriguez et al., 2004).

In summary, the preceding paragraphs have provided the evident about the excellent performance that can be harvested by the QMS adopters. However, the competition today is stiffer than previous. Consequently, excellent is not enough but beyond excellent is a necessary for any organizations. In addition to the discussion on QMS, the succeeding paragraphs discuss on the promisable strategic control systems, the Balanced Scorecard (BSC) that can be used by QMS adopters in gaining super excellent performance.

BALANCED SCORECARD (BSC)

A significant contribution by Kaplan and Norton towards enriching the management accounting knowledge and literature, which was first presented in 1992, is BSC (Kaplan & Norton, 1992). Initially, it is a comprehensive performance measurement system that complements financial and nonfinancial measures. Since then, the BSC is an excellent system which has attracted much attention from practitioners, academic and researcher (Norreklit

2000). The BSC translates the vision and strategy of a business unit into objectives and measures in four different perspectives, namely: (1) financial, (2) customer, (3) internal business process, and (4) learning and growth perspectives (Kaplan & Norton, 1996a, pp30-31). The financial perspective identifies how the company wishes to be viewed by its shareholders. The customer perspective decides how the company wishes to be viewed by its customer. The internal business process perspective describes how the company operates their business process to satisfy its shareholders and customers. The organizational learning and growth perspective involves the changes and improvement which the company needs to realize to make its vision come true.

Further, the BSC is not only a performance measurement system but Kaplan and Norton (1996a, p19) highlight that the BSC is a strategic control system which can be used to:

- 1. clarify and gain consensus about strategy;
- 2. align departmental and personal goals to strategy;
- 3. link strategic objectives to long term targets and annual budget;
- 4. identify and align strategic initiatives; and
- 5. obtain feedback to learn about and improve strategy.

The importance of BSC is more prevalent in today’s environment where organizations need to respond well to the dynamic environment and stiff competition. As such, the BSC can help managers to recognize changes in the external environment, determine and evaluate development towards organizational strategy and affirm achievement of organizational strategy (Kaplan & Norton, 1996b).

Table 2: The balanced scorecard as a strategic control system

(1) Clarifying and translating the vision and strategy	Clarifying the vision Gaining consensus
(2) Communicating and linking	Communicating and educating Setting goals and decomposing Linking rewards to performance measures
(3) Planning and target setting	Setting targets Aligning strategic initiatives Allocating resources Establishing milestones
(4) Strategic feedback and learning	Articulating the shared vision Supplying strategic feedback Facilitating strategy review and learning

Source: Kaplan and Norton (1996a, p.11)

In sum, the BSC is a system that can be used to align the strategy formulation and strategy implementation. The Table 2 shows that the BSC as a strategic control system. It consisting four processes namely; (1) clarifying and translating the vision and strategy, (2) communicating and linking, (3) planning and target setting, and (4) strategic feedback and learning.

BALANCED SCORECARD AND EXCELLENCE

Several researchers such as Davis and Albright (2004), Hoque and James (2000), Ittner et al. (2003) and Braam and Nijssen’s (2004) have attempted to study on the association between BSC usage and organizational performance. In a quasi-experimental study of banking organizations, Davis and Albright (2004) found that the implementation of BSC is associated with improved financial performance. The authors also suggest for more research on the BSC should be undertaken including different type of industry and strategy. Their findings are consistent with earlier study by Hoque and James (2000).

Hoque and James (2000) investigated Australian manufacturing firms on the relationship between BSC usage and organizational performance. This study used the contingency theory perspective. The usage of BSC was measured using items that incorporate four dimensions of the BSC which are typically found in the BSC literature. Organizational performance was a self reported measure relative to competitors along the five

dimensions of performance which were: return on investment, margin on sales, capacity utilization, customer satisfaction, and product quality. Their findings indicated a significant positive relationship between the usage of dimension of BSC and better performance. The researchers noted however, their study is restricted to manufacturing firms, thus required more studies of BSC on other sectors such as services firms.

In response to the future understanding of BSC in other sectors, a study of services firm was carried out by Ittner et al. (2003). They examine the relationship between BSC usage and financial performance. Data of their study was collected using survey of 140 US financial services firms. They found that BSC usage is not associated with improvement on economic performance. However, the authors conclude that their contrast finding with other study probably due to their study rely on actual financial performance rather than relying exclusively on self reported organizational performance.

Further, the above finding by Ittner et al. (2003) probably can be explained by findings of Braam and Nijssen’s (2004) study. By using empirical evidence from Dutch firms, they found that BSC usage will not automatically improve organizational performance. Instead, BSC usage that complements corporate strategy will increase firm performance and BSC that is not consistent with the corporate strategy will decrease firm performance. Compared to the study by Ittner et al. (2003), the findings of this study is more convincing since researchers was measuring company performance with more comprehensive approach. Company performance was measured in three stages which were (1) financial performance using ROI (2) company’s perceived performance by respondent and (3) composite measures of ROI and perceived performance.

EXECUTING QMS: THE CALL FOR BSC

According to Chenhall (2003), appropriate control systems must be existed to support QMSs. In line with Chenhall (2003), Daniel and Reitsperger (1991) also argued that the control systems must be consistent with QMSs to gain organizational excellence. Additionally, Vora (2002, pp1152-1153) explains how QMSs is compatible with BSC.

‘It (QMSs model, figure 1.0) shows that when we have excited employee, they will improve processes and delight the customers. This, in turn, will lead to better operational and financial performance. The Balanced Scorecard approach of Kaplan & Norton (1996) also advocates a similar focus on customers, learning and growth (employees), internal/business process and financial’

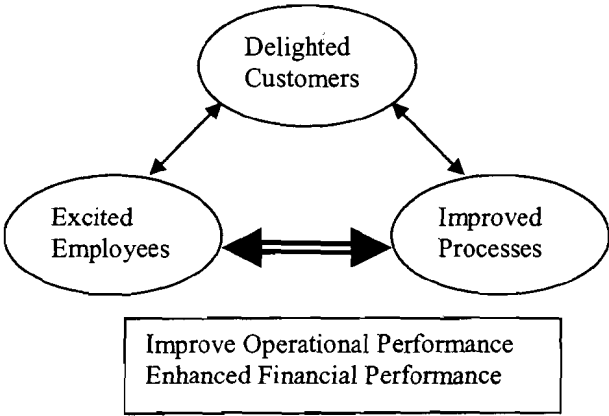


Figure 1: Quality Management Strategies Model (Vora , 2002, p1153)

Further, the BSC is recognized as one of the strategic control system that has capability to facilitate the alignment of daily operations with the overall organizational strategy (Mooraj, et. al., 1999) and also play an important role in supporting QMSs successful (Moura E Sa & Kanji, 2003). As such, the BSC can be utilized for examining the development of organizational strategy towards the predetermined goals.

The ‘usage of the BSC will not automatically improve company performance’ (Braam & Nijssen, 2004, p336). On the other hand, they noted that, if BSC is co-aligned carefully to organizational strategy, it will lead organization to achieve superior excellence. As have been discussed in the previous section, BSC can be used as

strategic control systems framework (Kaplan & Norton, 1996a). Thus, this section review literature on the issues related to linkage between QMSs, control systems and organizational excellence.

Banker et al. (1993) for example, investigated the linkage between the adoption of QMSs and control systems. An important conclusion was derived from this survey research. The introduction of QMSs have strong positive relationship with the control systems that emphasize the role of workers. Thus, this conclusion agreed with the common theme that organization needs to align their strategy with control systems for gaining excellence performance. In another study, Daniel and Reitsperger (1991) found that the organizations use different control systems for different quality strategy.

Furthermore, Ittner and Larcker (1997) examined the association between quality strategy and strategic control systems. They found that there is a strong relationship between the emphasis on quality strategy and SCS. Additionally, a survey of a random sample of manufacturing firms in Australia was conducted by Perera et al. (1997). Their research examines the association between customer focus strategy and emphasis on non financial measures performance measures. They found the significant association between customer focus strategy and the use of non financial measures.

Recently case studies done by Andersen et al. (2004) found that QMS can be implemented more successfully when associated with strategic control systems. Thus, it can be concluded that although the reasons for failure of QMS implementation are complex, the result suggesting that this failure relates to poor linkage between QMS and strategic control. However, as a case study, it naturally imposes limitation of the generalizability of their findings. Therefore, a further study involving larger sample is needed to help validate and extend the generalizability of the finding.

CONCLUSION AND DIRECTION FOR FUTURE RESEARCH

The new approach to strategic control systems suggested in the BSC is consistent with QMSs such as teamwork, empowerment, continuous improvement, and customer focus (Kanji, 2002, p165). Nowadays, QMS has been regarded as an excellent strategy for organizations to survive in this competitive world. However, having a good strategy alone is not adequate. Thus, for organizations that already utilize QMS, the BSC can help them execute their QMS more successfully (Kaplan & Norton, 2001). Indeed, the benefits that can be gained by organization from BSC are very promising. It has been proven that, all BSC users including the most basic BSC until the most developed BSC can expect the same benefits from BSC (Speckbacher et al, 2003). Therefore, the BSC should be using in executing QMS. In sum, this paper reviews the literature that generally support and provide evident to the statements by Kaplan and Norton (2001, p376) - *The Balanced Scorecard is perfectly consistent with TQM principles*.

The discussions of this paper raise an important research agenda for future research. According to our discussions, the potential effect of BSC in explaining the relationship between QMS and organizational performance needs further empirical investigation. Future research for example, needs to investigate the interaction effect between QMS and BSC on organizational performance. There are various forms of research models that can be used by future researchers to investigate the interrelationship between TQM, BSC and organizational performance, such as linear additive models, interaction models, intervening models and systems models (Chenhall, 2003).

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